

Rabies and potential rabies exposures in King County and Washington State, 2017

Rabies is a preventable viral infection of humans and other mammals that is most often transmitted through the bite of a rabid animal. The rabies virus infects the central nervous system (the brain and the spinal cord). Proper treatment obtained promptly after exposure to a rabid animal can prevent rabies in humans, but once symptoms begin, rabies is almost always fatal. Approximately one to three humans die from rabies annually in the United States. In Washington State, bats are the only known natural animal reservoir for the rabies virus; bats can be infected with the virus and don't always appear sick or die, which allows the rabies virus to persist in the Washington State bat population.

King County animal rabies testing, 2017

The Washington State Public Health Laboratory (WSPHL) performs rabies testing on all animals that have potentially exposed people to rabies. Animals that have potentially exposed only pets to rabies can be tested at the Oregon State University Veterinary Diagnostic Laboratory at the pet owner's expense. For more information, please see [testing bats for rabies in King County](#).

In 2017, a total of 90 animals from King County were tested for rabies, including 78 (87%) bats, five (6%) cats, and two (2%) dogs. Eight of 78 (10%) bats tested positive for rabies (**Table 1**); all other animals tested negative for rabies. All eight rabies-positive bats were tested at the WSPHL; of the 42 bats tested at WSPHL, 19% were positive for rabies. Six of the eight rabies-positive bats were Big brown bats (**Table 2**). Testing of animals was highest in August, and 80% of all tests were conducted from June to September, a similar pattern to previous years but with a higher number of animals tested overall (**Figure 1**).

Table 1. Animals tested for rabies by species, King County, 2010–2017 (n = 587)

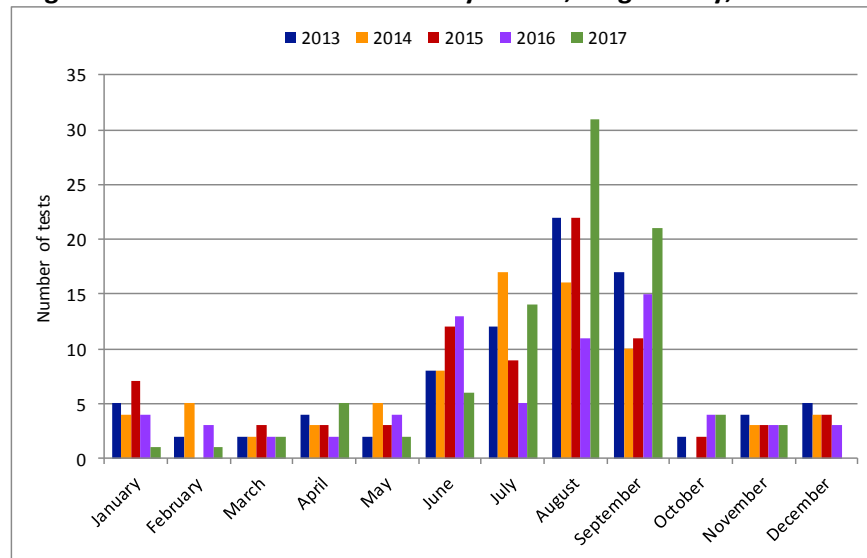
Year	Bat (%pos.) ¹	Cat	Dog	Raccoon	Rodent	Other Wild	Other Domestic	Total
2010	45 (4%)	6	8	3	2	3	1	68
2011	45 (2%)	7	1	1	0	0	0	54
2012	47 (2%)	10	2	2	1	1	2	65
2013	64 (6%)	8	6	5	0	0	2	85
2014	64 (6%)	8	1	2	0	2	0	77
2015	65 (3%)	10	3	1	0	0	0	79
2016	52 (6%)	12	3	2	0	0	0	69
2017	78 (10%) ²	5	2	1	2	1	1	90
Total	460 (5%)	66	26	17	5	7	6	587

¹Only bats tested positive for rabies; ²42 bats were tested at WSPHL and 36 at OSU

Table 2. Bat species tested for rabies, King County, 2017 (n = 78)

Bat species	Number (% of total)	Rabies positive (% within row)
California myotis (<i>Myotis californicus</i>)	33 (42%)	0
Big brown (<i>Eptesicus fuscus</i>)	22 (28%)	6 (27%)
Little brown (<i>Myotis lucifugus</i>)	7 (9%)	0
Silver-haired (<i>Lasionycteris noctivagans</i>)	6 (8%)	0
Long-eared myotis (<i>Myotis evotis</i>)	4 (5%)	1 (25%)
Yuma myotis (<i>Myotis yumanensis</i>)	1 (1%)	1 (100%)
Fringed myotis (<i>Myotis thysanodes</i>)	1 (1%)	0
Species not identified	4 (5%)	0
Total	78 (100%)	8 (10%)

Figure 1. Animals tested for rabies by month, King County, 2013–2017 (n = 587)



Washington State animal rabies testing, 2017

The Washington State Department of Health’s document [Washington State Animals Tested for Rabies](#) lists the results of animal rabies testing statewide since 1988. Over the past ten years, 60% of all animals tested annually were bats; followed by cats (21%) and dogs (13%). In 2017, 376 bats were tested, with 22 (6%) positive for rabies. Almost 150 other animals were also tested in 2017, and all were negative for rabies virus. In 2015, one privately owned, unvaccinated cat tested positive for rabies. Several people underwent [rabies post-exposure prophylaxis](#) after a bite or other potential rabies virus exposure to this rabid cat.

King County and Washington State rabies post-exposure prophylaxis (PEP), 2017

Potential human exposures to rabies that should be evaluated by Public Health include:

- a bite or scratch from a bat, or direct skin contact with a bat,
- when a sleeping person wakes to a bat in the room,
- a bat is found in an area where children have been playing unattended, and
- a bite or scratch from domestic or wild animals showing signs suggestive of rabies.

Animal bites to people in foreign countries where rabies may be endemic, especially bites from bats, primates, dogs, cats, or wild carnivores, should also be reported to Public Health at 206.296.4774. Rabies PEP is administered to persons who have been exposed to a rabies-infected animal or a potentially rabies infected animal when 1) the animal is not available for rabies testing **OR** 2) a dog, cat or ferret that bites a person and is suspected of having rabies cannot be confined and observed for signs of rabies for ten days.

In most years, roughly two-thirds of rabies PEP given in Washington State has been a result of bat exposures, 10-15% from raccoon exposures, 10% from dog bites (mostly international), and the remainder from other animal exposures (e.g. monkeys).

In 2017, rabies PEP was recommended to 120 King County residents who were reported to Public Health with animal exposures. Of these, 60 (50%) were exposed in King County, 27 (23%) in other areas of the U.S. and 33 (28%) abroad. Most (82/87, 94%) of the suspected domestic rabies exposures resulted from bat exposures.

Additional information

Information about bats and rabies, including safely catching a bat, rabies testing, and wildlife control services that can assist with removal of bats from residences is available at [Public Health: Bats and Rabies](#).